

with FUO is an indicator of fever of non-bacterial etiology suggesting that empirical antibiotic therapy might be discontinued in these patients. This strategy should be tested prospectively.

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***Candida lusitanae* Blood Stream Infection in King Faisal Specialist Hospital & Research Centre, Riyadh, Saudi Arabia**

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**Background:** *Candida lusitanae* is a rare non-albicans *Candida* spp. which is increasingly recognized as an emerging nosocomial pathogen particularly in immunocompromised patients since 1990, with a high mortality rate.

**Objectives:** We describe the pediatric cases of *Candida lusitanae* blood stream infection in KFSH&RC over nine years to elaborate on an emerging organism, its predisposing factors, antifungal susceptibility, and the clinical outcome of *C. lusitanae* candidemia.

**Methods:** The records of the microbiology laboratory at the KFSH&RC were reviewed for the period 01 January 1996 through 31 December 2004 to identify all cases of hematogenous *C. lusitanae* candidemia. A total of 6 cases were documented and the medical records of all six patients were reviewed.

**Results:** In our institution, *C. lusitanae* represent 2.6% of the total *Candida* species isolated from 229 pediatric blood culture samples over 9 years period (1996–2004). Six cases of *C. lusitanae* blood stream infections were isolated from 6 patients. Two neonates with congenital heart disease, 4 infants with CHD, FTT, Omenn's syndrome and HUS respectively. All of them had fungemia associated with broad-spectrum antibiotic therapy and central venous lines, 5 required intensive care (ICU) admission and 4 received TPN, which are all known to be risk factors for fungemia by other *Candida* species. In our cases, the MIC for the isolates from 3 patients were >32 µg/ml for AmB but sensitive to fluconazole MIC < 8 µg/ml. Five patients treated successfully with fluconazole.

**Conclusion:** *C. lusitanae* is an important cause of nosocomial infection among immunocompromised hosts. Early identification and proper susceptibility testing is very important guidance toward the successful treatment.

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**Retrospective Study of Pediatric *Candida* Blood Stream Infection at KFSHRC**

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**Background:** *Candida* species are important blood stream pathogens that are being isolated with increasing frequency. Despite the availability of effective antifungal therapy, the mortality rate associated with *Candida* infection remains high.

**Objective:** To describe the epidemiology of candidemia in the pediatric group at the King Faisal Specialist Hospital & Research Centre (KFSH&RC), in relation to underlying medical condition, predisposing factors, concurrent infection antimicrobial agents, antifungal treatment and outcome.

**Method:** Retrospective chart review of all patients with *Candida* blood stream infections age 0–14 years at KFSH&RC utilizing Microbiology and Infection Control databases for the period January 1996 through December 2004.

**Results:** Total of 229 pediatric patients with positive blood culture for *Candida* spp. 91.2% were Saudi & 59.3% were males. The majority of them (30.5%) in the hematology/oncology ward followed by (20%) in the pediatric intensive care unit (PICU). 50.6% of the cases presented with fever and 27.5% with hypotension. Most of the patients (89.0%) had central venous lines which were removed after candidemia in 76.4% with survival of 65.1%. Other risk factors like total parenteral nutrition (TPN) recorded in 51% of the patients, and 61.5% received ≥3 antibiotics. Dissemination of the fungal infection occurred in 17.4% and the mortality because of candidemia alone is 3% and candidemia as a contributing factor for mortality in addition to other causes in 19%.

**Conclusion:** *Candida* is a major cause of blood stream infections at KFSH&RC, contribution to mortality in 22%. *Candida albicans* is the predominant pathogen followed by *C. tropicalis* and *C. parapsilosis*. CVL is an important risk factor and its removal improves outcome.